



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

September 8, 2010

Certified Mail
7008 1830 0001 4713 4928

Mr. Thomas Anderson
Environmental Health & Safety
Bodycote Thermal Processing, Inc.
1975 North Ruby Street
Melrose Park, Illinois 60160

Re: 0311860011 -- Cook County
Bodycote Thermal Processing, Inc.
ILD005071808
Log No: C-544-M-23
Received: January 12, 2010
SRP Technical

Dear Mr. Anderson:

This is in response to your January 6, 2010 submittal entitled Modification to Remedial Action Plan, submitted on your behalf by Christopher L. Mabbett, of MABBETT & ASSOCIATES, INC. (M&A) and received by the Illinois EPA on January 12, 2010. Remedial activities for contamination in the Heat Treating Building (HTB) and the Gantry Salt Buildings (GB/SB) at the subject facility are being carried out under Illinois EPA's Site Remediation Program. The submittal proposed modifications to the Remedial Action Plans (RAP) associated with the HTB and GB/SB.

The subject submittal was reviewed by the Illinois EPA as a request to modify the approved RAP for the HTB and GB/SB and is hereby approved subject to the following conditions and modifications:

1. The proposal to remove seven groundwater monitoring wells, MCA-2, M&A-103, M&A-105, M&A-107, M&A-119, M&A-120, and M&A-121, from the Heat Treating Building (HTB) groundwater monitoring program can be approved at this time.
2. The proposal to conduct a product recharge study at the HTB can be approved. Prior to implementing this study, the facility must submit a detailed plan, which includes at a minimum, but need not be limited, the following:

- a. Introduction/Purpose. An introductory section should be in the report which contains: (1) General background information regarding the project; (2) The purpose and goals of the submittal; and (3) The scope of the project.
 - b. Existing Site Conditions. The report should contain information regarding:
 - i. The geology and hydrogeology, as appropriate, of the site; and
 - ii. The contamination at the site including a description of all investigations conducted at the site to date, the horizontal and vertical extent of contamination, the physical and chemical properties of the contaminants of concern and the distribution of the contamination with the area of concern.
 - c. Groundwater monitoring wells to be utilized in the study.
 - d. Remedial Objectives.
 - e. Estimated time to complete study.
3. The proposal to remove the following groundwater monitoring wells from the GB/SB groundwater monitoring program can be approved at this time: (1) M&A-207, M&A-214, M&A-217, M&A-220, M&A-226, MW-301, MW-302, MW-303 and MW-304 for VOC analysis only; and (2) M&A-211, M&A-213, M&A-214, M&A-220, MW-301 and MW-304 for Cyanide analysis only.
4. Due to a transposition error of 35 Ill. Adm. Code 742, TACO, Tier 2, Class II, Groundwater Remediation Objectives (GROs) for tetrachloroethylene (PCE) and trichloroethylene (TCE) made in the Illinois EPA's May 15, 2000 letter, the revised GROs for PCE and TCE at the Gantry and Salt Building (GB/SB) are as follows:

PCE (shallow):	45.00 mg/L
TCE (shallow):	0.039 mg/L
TCE (Intermediate):	0.029 mg/L

NOTE: There is no GRO for PCE (Intermediate).

5. Regulation 35 Ill. Adm. Code 742, TACO requires that prior to utilization of GROs that free product be removed to the extent practicable. Thus, a determination that free product has been removed to the extent practicable by not exceeding one-eighth of an inch in the well for a period of one year cannot be approved at this time. It may be necessary for the facility to conduct an impracticable remediation determination should the conditions determine such is the case.

6. At this time, the Illinois EPA is neither approving nor disapproving the utilization of the Weak Acid Dissociable Cyanide Method for analyzing Cyanide. In order for the Illinois EPA to make a determination as to the appropriateness of this method, the facility must also, in addition to analyzing for total Cyanide utilizing SW-846 Method 9012, analyze Cyanide for Weak Acid Dissociable Cyanide utilizing one of the two Methods proposed in the subject submittal. A comparison between the two analyses must be made and a new proposal for utilization of the Weak Acid Dissociable Cyanide Method must be submitted to the Illinois EPA for review and approval. All data must be provided and include rationale for utilizing an alternate method.
7. Groundwater monitoring wells approved to be removed and not utilized in any other regulated groundwater monitoring program must be properly plugged and abandoned in accordance with 77 Ill. Adm. Code 920.120. In addition, the facility must submit certification that plugging and abandonment of the wells was carried in accordance with those regulations to the Illinois EPA at the address below within sixty (60) days of the date that the well is plugged and abandoned. All information should be submitted to the appropriate State Agencies.
8. Except as modified herein, remediation at the HTB and GB/SB shall be carried out in accordance with the plans approved by the Illinois EPA on December 28, 2000, March 12, 2001, and July 24, 2001.
9. A completed DRM-2 form must accompany all submittals made to the Illinois EPA regarding this project.

This action shall be considered the Illinois EPA's final decision of the subject submittal. Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your modification request or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer and discovered violation of these laws to the appropriate regulating authority.

Page 4

Should you have any questions regarding the aspects of this letter, please contact Paula Stine at 217/524-3861; for all other issues please contact James K. Moore at 217/524-3295.

Sincerely,

Stephen F. Nightingale bkm

Stephen F. Nightingale, PE
Manager, Permit Section
Bureau of Land

PS-JM
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bkm

cc: Christopher Mabbett, MABBETT & ASSOCIATES, INC.
USEPA Region 5, Don Heller



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR

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NOV 01 2010

Mr. Thomas Anderson
Environmental Health & Safety
Bodycote Thermal Processing, Inc.
1975 North Ruby Street
Melrose Park, Illinois 60160

Re: 0311860011 -- Cook County
Bodycote Thermal Processing, Inc.
ILD005071808
Log No: C-544-M-24
Received: September 29, 2010
SRP Technical

Dear Mr. Anderson:

This is in response to your September 27, 2010 letter submitted on your behalf by Christopher L. Mabbett, of MABBETT & ASSOCIATES, INC. (M&A) and received by the Illinois EPA on September 29, 2010. Remedial activities for contamination in the Heat Treating Building (HTB) and the Gantry Salt Buildings (GB/SB) at the subject facility are being carried out under Illinois EPA's Site Remediation Program. This letter provides clarification for a transposition error in the Illinois EPA's September 8, 2010 letter (Log No. C-544-M-23). This letter shall supersede the Illinois EPA's September 8, 2010 letter.

The subject letter was reviewed by the Illinois EPA and is hereby approved. The following conditions and modifications shall be met:

1. The proposal to remove seven groundwater monitoring wells, MCA-2, M&A-103, M&A-105, M&A-107, M&A-119, M&A-120, and M&A-121, from the Heat Treating Building (HTB) groundwater monitoring program can be approved at this time.
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 - a. Introduction/Purpose. An introductory section should be in the report which contains: (1) General background information regarding the project; (2) The purpose and goals of the submittal; and (3) The scope of the project.

Rockford • 4309 N. Main St., Rockford, IL 61103 • (815) 987-7760

Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131

Bureau of Land – Peoria • 7620 N. University St., Peoria, IL 61614 • (309) 693-5462

Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 W. Harrison St., Des Plaines, IL 60016 • (847) 294-4000

Peoria • 5415 N. University St., Peoria, IL 61614 • (309) 693-5463

Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800

Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

- b. Existing Site Conditions. The report should contain information regarding:
 - i. The geology and hydrogeology, as appropriate, of the site; and
 - ii. The contamination at the site including a description of all investigations conducted at the site to date, the horizontal and vertical extent of contamination, the physical and chemical properties of the contaminants of concern and the distribution of the contamination with the area of concern.
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9. A completed DRM-2 form must accompany all submittals made to the Illinois EPA regarding this project.

This action shall be considered the Illinois EPA's final decision of the subject submittal. Within 35 days after the date of mailing of the Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of the Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your modification request or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer and discovered violation of these laws to the appropriate regulating authority.

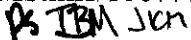
Should you have any questions regarding the aspects of this letter, please contact Paula Stine at 217/524-3861; for all other issues please contact James K. Moore at 217/524-3295.

Sincerely,



Stephen F. Nightingale, P.E.
Manager, Permit Section
Bureau of Land

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cc: Christopher Mabbett, MABBETT & ASSOCIATES, INC.
USEPA Region 5, Don Heller

Mabbett & Associates, Inc.
Environmental Consultants & Engineers

**ANNUAL POLYCHLORINATED BIPHENYL
ACTION SUMMARY REPORT**

**BODYCOTE THERMAL PROCESSING
MELROSE PARK, ILLINOIS**

PROJECT NO. 1998002.286

December 15, 2010



**Mabbett & Associates, Inc.
Environmental Consultants & Engineers**

*5 Alfred Circle
Bedford, MA 01730-2318
Telephone: (781) 275-6050
Toll Free: (800) 877-6050
Facsimile: (781) 275-5651
info@mabbett.com
www.mabbett.com*

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Mabbett & Associates, Inc.
Environmental Consultants & Engineers

A SERVICE DISABLED VETERAN OWNED SMALL BUSINESS

5 Alfred Circle
Bedford, Massachusetts
01730-2318
Tel: (781) 275-6050
Fax: (781) 275-5651
info@mabbett.com
www.mabbett.com

December 17, 2010

Mr. Donald Heller
Regional PCB Coordinator
US EPA Region V
77 W. Jackson Blvd.
Chicago, IL 60604

Re: Polychlorinated Biphenyl Action Summary Report
Bodycote Thermal Processing
1975 N. Ruby Street
Melrose Park, IL 60160
Project No. 1998002.286

Dear Mr. Heller:

On behalf of Bodycote Thermal Processing (Bodycote), Mabbett & Associates, Inc. (M&A) has prepared the enclosed Annual Polychlorinated Biphenyl Action Summary Report for the facility located at 1975 North Ruby Street in Melrose Park, Illinois.

The PCB Action Summary Report for the Heat Treat Building is attached for your review and consideration. If you have any questions or require any further action, please do not hesitate to contact me at (781) 275-6050.

Very truly yours,

MABBETT & ASSOCIATES, INC.

BY:

James R. Greacen
Director, Site Assessment and Restoration

/tw

Enclosure: Annual Polychlorinated Biphenyl Action Summary Report dated December 15, 2010

cc: Mario Ciampini (Bodycote Thermal Processing)
Tom Anderson (Bodycote Thermal Processing)
Paula Stine (IEPA)
(MF)

ACKNOWLEDGMENT

This *Annual Polychlorinated Biphenyl Action Summary Report* for the Site located at 1975 North Ruby Street in Melrose Park, Illinois has been prepared for the sole and exclusive use of Bodycote Thermal Processing, Inc. This report is subject to and issued in connection with the Letter-Agreements dated August 11, 2010. Any use or reliance upon information provided in this report, without the specific written authorization of Bodycote Thermal Processing, Inc. and Mabbett & Associates, Inc. shall be at the User's sole risk. No attempt has been made to assess the compliance status of any past or present Owner or Operator of the Property with any Federal, state, or local laws or regulations except as described herein with respect to this particular project.

The findings, observations, and conclusions presented in this report, including the extent of subsurface explorations and other tests, are limited by the scope of services outlined in our Letter-Agreements which reflect schedule and budgetary constraints. The professional opinions and findings presented in this report are based on the facts and information conveyed to or observed by Mabbett & Associates, Inc. during completion of this project. Furthermore, assessment and field operations have been performed in accordance with generally accepted engineering practices. No other warranty, expressed or implied, is made.

The assessment presented in this report is based solely upon the laws and regulations existing as of the date of this report as well as the information gathered to date including a limited number of subsurface explorations made on the dates indicated and performed by others. Should further environmental or other relevant information be developed at a later date, Bodycote Thermal Processing, Inc. should bring such information to the attention of Mabbett & Associates, Inc. as soon as possible. Based upon an evaluation, Mabbett & Associates, Inc. may modify this report and its conclusions.

This report was prepared by the following Mabbett & Associates, Inc. personnel:



Christopher L. Mabbett, MS, EIT
Environmental Engineer

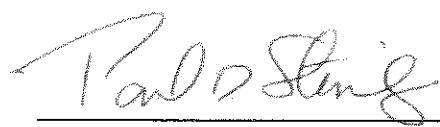
This report has been reviewed and approved by:

MABBETT & ASSOCIATES, INC.

BY:



James R. Greacen, PG
Director, Site Assessment and Restoration



Paul D. Steinberg, PE
Senior Vice President & General Manager

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I. INTRODUCTION

Mabbett & Associates, Inc. (M&A) has prepared this Annual Polychlorinated Biphenyl (PCB) Action Summary Report on behalf of our client, Bodycote Thermal Processing (Bodycote), for the Site located at 1975 North Ruby Street in Melrose Park, Illinois. This summary report has been prepared in accordance with 40 CFR 761, the Polychlorinated Biphenyl Action/Work Plan dated September 12, 2006, and the Polychlorinated Biphenyl Action/Work Plan Amendment letter approved by EPA on March 1, 2010.

The presence of PCB contamination in groundwater and non-aqueous phase liquid (NAPL) beneath the Heat Treat Building (HTB) within a portion of the Bodycote facility was identified in 2000. Source investigations and analytical sampling that define the nature and extent of PCB contamination have been ongoing since that time. The following sections discuss the data collected and PCB actions taken during 2010 as part of the Site's approved PCB Action/Work Plan.

II. DISPOSAL SITE DESCRIPTION

The Bodycote facility is an industrial complex located at 1975 North Ruby Street in Melrose Park, Illinois. The facility was constructed in the 1950s and has been the site of heat treating operations since that time. The property is located in an industrial zoned area and is planned for continued use as a manufacturing facility into the foreseeable future. A Site Location Map and a Monitoring Well Location Plan are provided as Drawings L-1 and L-2, respectively.

III. SITE HISTORY

The presence of PCBs beneath the Bodycote HTB was discovered in May 2000 during routine profiling of groundwater and dense non-aqueous phase liquid (DNAPL) associated with remedial efforts to remove free product from on-site well M&A-113 (refer to Drawing L-2). Of the nine drums that were profiled for off-site disposal, eight had detectable concentrations of Aroclor 1248 ranging from 341 milligrams per kilogram (mg/kg) to 516 mg/kg. These detections were above applicable state and federal standards for PCBs.

In response to the May 2000 PCB detections, M&A initiated an in-depth review of available documentation for the property in order to identify potential sources of PCB contamination at the Site. M&A reviewed records at the Bodycote facility, the State Fire Marshall, the Village of Melrose Park Fire Department, the Village of Melrose Park Building Department, and Village of Melrose Park Health Office, however, no records were located which documented PCB use, spills, or the presence of PCB containing equipment at the Site. Bodycote personnel were also interviewed for their knowledge regarding PCB spills or PCB containing equipment at the facility, but no known PCB spills or PCB containing equipment was identified to the best of the personnel's knowledge.

During September 2000, M&A sampled NAPL occurring in monitoring wells M&A-113 and M&A-111 for PCB analysis. Laboratory results indicated the presence of Aroclor 1248 at concentrations of 1,600 mg/kg and 3,308 mg/kg, respectively. Upon further corroboration of laboratory results, M&A conducted a round of groundwater sampling in October 2002. Samples were collected from seven monitoring wells located in the Heat Treat Building and submitted for laboratory analysis of PCBs in accordance with United States Environmental Protection Agency (EPA) Test Method 8082.

Detected concentrations of PCBs were observed in four of the seven monitoring wells and ranged between 1.6 micrograms per liter ($\mu\text{g}/\text{L}$) and 600 $\mu\text{g}/\text{L}$. The Illinois Environmental Protection Agency (IEPA) TACO Tier I Class II (restricted use) groundwater standard for PCBs is 2.5 $\mu\text{g}/\text{L}$.

Between 2002 and 2006, M&A conducted additional groundwater and NAPL sampling in order to obtain the additional data necessary for formulating a PCB Action/Work Plan. During this time, low flow sampling methods were used to reduce turbidity to obtain more representative samples to evaluate dissolved PCB concentrations. The resulting analytical results were significantly lower using the revised and more appropriate sampling techniques. The results of the PCB sampling events are summarized in Tables 1 and 2. NAPL recovery efforts initiated at the Site under the IEPA Voluntary Cleanup Program (VCP) are removing PCB mass from the subsurface and may also be contributing to the lower PCB concentrations observed during recent sampling events.

In October 2005, M&A contacted Ms. Pricilla Fonseca (Region V EPA) to establish the actions necessary to address the identified PCBs at the facility. Ms. Fonseca informed M&A that Bodycote needed to file a "Notice of PCB Activity" (Form #7710-53) and a PCB Action/Work Plan with the EPA. Form #7710-53 was filed on November 8, 2005. A PCB Action/Work Plan was submitted on September 12, 2006 and proposed the following:

- Install additional monitoring wells in the northwest region of the Heat Treat Building and outside the northwestern wall of the Heat Treat Building to confirm the extent of PCB contamination;
- Continue NAPL recovery efforts initiated under the IEPA approved VCP; continued removal of light non-aqueous phase liquid (LNAPL) and DNAPL was expected to result in further reductions in PCB concentrations at the Site;
- Maintain constructed engineered barriers, utilizing existing concrete slab flooring, over areas of residual soil impacts to eliminate potential exposure; and
- Conduct ongoing periodic training of Bodycote personnel in appropriate PCB waste management procedures.

On November 15, 2006, M&A personnel oversaw the advancement of three soil borings in and around the northwestern portion of the HTB for the purpose of delineating the extent of PCBs. The soil borings were advanced by Precon Drilling, Inc. of Addison, Illinois using hollow stem auger drilling techniques. The soil borings were completed with 2-inch diameter monitoring wells and designated M&A-130, M&A-131, and M&A-133 (refer to Drawing L-2).

Monitoring wells M&A-130 and M&A-131 are located outside of the Heat Treat Building along Ruby Street. Shallow monitoring well M&A-130 was advanced to 16 feet below ground surface (bgs) with a 10-foot screen interval located between 5 and 15 feet bgs. Intermediate monitoring well M&A-131 was advanced to 30 feet bgs with a 10-foot screen interval located between 19 and 29 feet bgs. Soils encountered during the advancement of these monitoring wells were generally clays with some silt and gravel. Visual or olfactory indicators of contamination were not observed in either of the boreholes located outside the Heat Treat Building.

Monitoring well M&A-133 is located in the northwest corner of the Heat Treat Building and is an intermediate well advanced to 30 feet bgs. The monitoring well is screened between 19 and 29 feet bgs. Soils encountered in the boring consisted of approximately 9 feet of fill material underlain by clays. Visual and olfactory screening of the soils did not indicate the presence of contaminants.

M&A collected groundwater samples from newly installed monitoring wells M&A-131 and M&A-133 (designated Outside-I and Inside-I, respectively on the laboratory report) on December 19, 2006. Monitoring well M&A-130 could not be sampled due to the lack of groundwater recharge into the well. Groundwater samples were submitted to TestAmerica Analytical Testing Corporation (TestAmerica) of Nashville, Tennessee for analysis of PCBs in accordance with EPA Test Method 8082. Based on the analytical results, PCBs were not detected in monitoring wells M&A-131 and M&A-133 above laboratory reporting limits.

PCB actions taken at the Bodycote facility since the submittal of the PCB Action Summary Report in March 2010 are summarized in the following sections.

IV. PCB ACTIONS

A. PCB Storage Area

In accordance with 40 CFR 761.65, Bodycote is required to have a hazardous waste storage area at the facility that is designed for PCB wastes if waste materials contain 50 parts per million (ppm) or greater of PCBs. A waste accumulation area has been established in the HTB. The accumulation area generally contains two to three 55-gallon drums including one for NAPL containing materials such as absorbent socks and bailers used for manual product removal, one for DNAPL extracted from monitoring well M&A-113, and one for LNAPL removed from monitoring well M&A-114. The drums are situated on secondary containment pallets with a storage capacity greater than 55 gallons. Drums stored in the Hazardous Waste Storage Area are labeled with the applicable waste codes and the words "CONTAINS PCBs" on a hazardous waste label. All PCB containing wastes at the Bodycote facility are disposed of within one year of their storage start date in accordance with 40 CFR 761.65.

B. Groundwater Sampling

PCB sampling was performed at thirteen (13) groundwater monitoring well locations during routine Semi-Annual Sampling Events conducted in accordance with the EPA PCB Action/Work Plan approval letter dated March 1, 2010. Tables 1 and 2 provide PCB sampling data collected to date for both groundwater and NAPL beneath the HTB. In general, concentrations of PCBs detected at the Site have decreased significantly since their discovery in May 2000. Additional discussion regarding the nature and extent of PCBs in groundwater and NAPL at the Bodycote facility is provided in Section V.

V. NATURE AND EXTENT OF PCB CONTAMINATION

Based on recent PCB data for the HTB (provided in Tables 1 and 2), PCBs appear to be limited to groundwater in the vicinity of monitoring wells M&A-104, M&A-110, M&A-111, M&A-112, and M&A-113, and NAPL in the vicinity of wells M&A-113 and M&A-114. As indicated in Table 1,

detected concentrations of PCBs in groundwater beneath the HTB have been below the IEPA TACO Tier I Class II (restricted use) Groundwater Standard of 2.5 µg/L since the spring 2006 sampling event with the exception of wells M&A-112 and M&A-113.

Drawing L-3 depicts the area of PCB groundwater contamination beneath the HTB in October 2010.

The successful elimination of LNAPL in monitoring well M&A-301 and the absence of PCBs in groundwater at downgradient boundary wells M&A-122, M&A-131, and M&A-301 indicate that the likelihood for migration of PCB contaminated groundwater in a westerly direction off the property is minimal (refer to Drawing L-4 Heat Treat Building Shallow Groundwater Contours).

VI. SUMMARY

Groundwater samples have been collected and analyzed for PCBs over the past several years from monitoring wells located throughout the Heat Treat Building in an effort to identify a source of PCB contamination at the Site. While no definitive source has been identified, the distribution of PCB contamination has been defined as a limited area beneath a portion of the Heat Treat Building of Bodycote facility. Dissolved concentrations of PCBs in groundwater have declined significantly since the discovery of PCBs at the Site in 2000, and with the exception of wells M&A-112 and M&A-113, have been below applicable IEPA TACO Tier I Standards since 2006.

NAPL recovery efforts in the Heat Treat Building are ongoing and appear to have reduced the occurrence of NAPL in this portion of the Site to only those areas around monitoring wells M&A-112 and M&A-113. Continuing to remove free product to the extent practicable in this area appears to be the most effective means of achieving additional PCB reductions in the Heat Treat Building.

VII. FURTHER EXPLORATION/REMEDIAL ACTIONS

Based on the information collected to date, M&A recommends continued NAPL removal as the primary course of action for reducing PCB contamination at the Site. The *in situ* DNAPL extraction system located in well M&A-113 will continue to operate on a full-time basis in accordance with the VCP established for the Heat Treat Building. In addition, Bodycote and M&A personnel will continue to maintain/monitor on a weekly basis oil absorbent media in monitoring well M&A-114.

M&A will continue to perform long term groundwater monitoring to coincide with the April and October semi-annual sampling events established under the VCP. PCB Summary Reports will be submitted to the EPA on an annual basis until such time that a status No Further Action has been issued for PCB contamination at the Site.

Based on the information presented herein, it is M&A's opinion that:

1. No active PCB release sources are present and based on diligent research no historic sources for PCBs have been identified.
2. The presence of PCBs appears to be commingled with NAPL and is limited in extent.
3. Groundwater quality appears to meet the IEPA standard for PCBs of 2.5 µg/L outside a limited and well-defined area.

4. The extent of PCBs in the subsurface has been reasonably delineated.
5. PCBs do not appear to be migrating and based on site data, the potential for significant PCB migration is low.
6. Ongoing efforts to remove NAPL under the approved IEPA VCP also appear to be the most appropriate remediation strategy for PCBs.
7. No further investigation or additional remediation appears warranted at this time.

TABLE 1
BODYCOTE THERMAL PROCESSING
HEAT TREATMENT BUILDING
SUMMARY OF GROUNDWATER POLYCHLORINATED BIPHENYL LABORATORY ANALYTICAL RESULTS

GW Samples			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
WELL	AQUIFER	DATE	($\mu\text{g/L}$)						
MW-6	Shallow	10/28/2008	BRL (<0.5)						
MW-10	Intermed	10/28/2008	BRL (<0.5)						
MCA-1	Shallow	10/28/2008	BRL (<0.5)						
		4/7/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
MCA-2	Shallow	10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/18/2006	BRL (<1.0)						
		10/19/2006	BRL (<0.5)						
		5/02/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
MCA-3	Shallow	4/07/2009	BRL (<0.5)						
MCA-4	Shallow	10/28/2008	BRL (<0.5)						
MCA-5	Shallow	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/17/2006 ⁽²⁾	NS						
		5/15/2006	BRL (<0.4)						
		10/18/2006	BRL (<0.5)						
		4/30/2007 ⁽²⁾	NS						
		10/17/2007	BRL (<0.5)						
		10/22/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		4/12/2010	BRL (<0.694)						
		10/19/2010	BRL (<0.485)						
M&A-101	Shallow	10/29/2008	BRL (<0.5)						
M&A-103	Shallow	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/17/2006	BRL (<1.0)						
		10/19/2006	BRL (<0.5)						
		4/30/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)						
M&A-104	Shallow	10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	1.6	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/17/2006	BRL (<1.0)						
		10/19/2006	BRL (<0.5)						
		4/30/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.592	BRL (<0.5)	BRL (<0.5)
		12/17/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.716	BRL (<0.5)	BRL (<0.5)
		4/12/2010	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	1.66	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)
		10/19/2010	BRL (<0.490)						

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GW Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
WELL	AQUIFER	DATE	(μ g/L)					
M&A-105	Shallow	10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/22/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/19/2006	BRL (<1.0)					
		10/19/2006	BRL (<0.5)					
		5/2/2007 ⁽⁴⁾	NS	NS	NS	NS	NS	NS
		10/17/2007 ⁽⁴⁾	NS	NS	NS	NS	NS	NS
		4/16/2008 ⁽⁴⁾	NS	NS	NS	NS	NS	NS
		10/22/2008 ⁽⁴⁾	NS	NS	NS	NS	NS	NS
M&A-106	Shallow	5/15/2006	BRL (<0.4)					
		10/19/2006	BRL (<0.5)					
		5/01/2007	BRL (<0.5)					
		10/18/2007	BRL (<0.5)					
		4/16/2008	BRL (<0.5)					
		10/22/2008	BRL (<0.5)					
		4/07/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
M&A-109	Deep	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/17/2006 ⁽¹⁾	NS	NS	NS	NS	NS	NS
		10/19/2006 ⁽¹⁾	NS	NS	NS	NS	NS	NS
		5/2/2007 ⁽¹⁾	NS	NS	NS	NS	NS	NS
		10/17/2007 ⁽¹⁾	NS	NS	NS	NS	NS	NS
		10/22/2008 ⁽¹⁾	NS	NS	NS	NS	NS	NS
M&A-110	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/17/2006 ⁽¹⁾	NS	NS	NS	NS	NS	NS
		5/15/2006	BRL (<0.4)					
		10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.31	BRL (<0.5)
		4/30/2007	BRL (<0.5)					
		10/17/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.11	BRL (<0.5)
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.848	BRL (<0.5)
		4/07/2009	BRL (<0.5)					
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.508	BRL (<0.5)	BRL (<0.5)
		4/12/2010	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	2.31	BRL (<0.658)
		10/19/2010	BRL (<0.495)	BRL (<0.495)	BRL (<0.495)	BRL (<0.495)	0.842	BRL (<0.495)
M&A-111	Intermed	10/02/2002	BRL (<25)	BRL (<50)	BRL (<25)	BRL (<25)	BRL (<25)	BRL (<25)
		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/18/2006	BRL (<1.0)					
		10/19/2006	BRL (<0.5)					
		4/30/2007	BRL (<0.5)					
		10/18/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.652	BRL (<0.5)
		4/16/2008	BRL (<0.5)					
		10/22/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.16	BRL (<0.5)
		12/17/2008	BRL (<0.5)					
		4/07/2009	BRL (<0.5)					
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	0.712	BRL (<0.5)	BRL (<0.5)
M&A-111	Intermed	4/12/2010	BRL (<0.625)	BRL (<0.625)	BRL (<0.625)	1.14	BRL (<0.625)	BRL (<0.625)
		10/19/2010	BRL (<0.490)					

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GW Samples			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
WELL	AQUIFER	DATE	2.5 ($\mu\text{g/L}$)						
M&A-112	Shallow	10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)		BRL (<0.5)		BRL (<0.5)
		10/23/2003	BRL (<1.0)	BRL (<2.0)	BRL (<1.0)	BRL (<1.0)			BRL (<1.0)
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		4/18/2006	BRL (<1.0)						
		10/19/2006 ⁽²⁾	NS						
		5/01/2007	BRL (<0.5)						
		10/18/2007	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.99	BRL (<0.5)	BRL (<0.5)
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.02	BRL (<0.5)	BRL (<0.5)
		4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.39	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.04	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/13/2010	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	0.73	BRL (<0.658)	BRL (<0.658)
		10/19/2010	BRL (<0.490)	BRL (<0.490)	BRL (<0.490)	BRL (<0.490)	1.17	BRL (<0.490)	BRL (<0.490)
M&A-113	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)
		4/19/2006	BRL (<1.0)	BRL (<1.0)	BRL (<1.0)		BRL (<1.0)	BRL (<1.0)	BRL (<1.0)
		10/19/2006	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.22	BRL (<0.5)	BRL (<0.5)
		5/01/2007	BRL (<0.5)						
		10/17/2007 ⁽²⁾	NS						
		10/23/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	5.21	BRL (<0.5)	BRL (<0.5)
		12/17/2008	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.29	BRL (<0.5)	BRL (<0.5)
		4/07/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)		BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		10/21/2009	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	1.12	BRL (<0.5)	BRL (<0.5)
		4/13/2010	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	BRL (<0.658)	5.39	BRL (<0.658)	BRL (<0.658)
M&A-114	Shallow	10/20/2010	BRL (<2.48)	BRL (<2.48)	BRL (<2.48)	BRL (<2.48)	9.73	BRL (<2.48)	BRL (<2.48)
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	16.3	BRL (<0.5)	11.1	BRL (<0.5)
		4/17/2006 ⁽³⁾	NS						
		10/19/2006 ⁽³⁾	NS						
		5/2/2007 ⁽³⁾	NS						
		10/17/2007 ⁽³⁾	NS						
		10/22/2008 ⁽³⁾	NS						
		10/20/2009	BRL (<0.5)						
		4/07/2010	BRL (<0.658)						
M&A-115	Intermed	10/19/2010	BRL (<0.495)						
		10/02/2002	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		10/23/2003	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/19/2006	BRL (<1.0)						
		10/19/2006	BRL (<0.5)						
		5/2/2007 ⁽¹⁾	NS						
		10/18/2007	BRL (<0.5)						
M&A-116	Shallow	4/08/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/18/2006	BRL (<1.0)						
		5/15/2006	BRL (<0.4)						
		10/18/2006	BRL (<0.5)						
		5/01/2007	BRL (<0.5)						
		10/17/2007 ⁽²⁾	NS						
(c) 2010, Mabbett & Associates, Inc.		10/22/2008 ⁽²⁾	NS						
		4/07/2010	BRL (<0.658)						
		10/20/2010	BRL (<0.505)						

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GW Samples		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
IEPA TACO Tier I Standard		2.5 ($\mu\text{g/L}$)						
WELL	AQUIFER	DATE						
M&A-117	Intermed	5/01/2007	BRL (<0.5)					
		10/17/2007	BRL (<0.5)					
		4/16/2008	BRL (<0.5)					
		10/22/2008	BRL (<0.5)					
		4/06/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
M&A-118	Shallow	10/28/2008	BRL (<0.5)					
M&A-119	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/18/2006	BRL (<1.0)					
		10/18/2006	BRL (<0.5)					
		4/30/2007	BRL (<0.5)					
		10/18/2007	BRL (<0.5)					
		10/18/2006	BRL (<0.5)					
M&A-120	Intermed	5/01/2007	BRL (<0.5)					
		10/17/2007 ⁽²⁾	NS	NS	NS	NS	NS	NS
		10/22/2008 ⁽²⁾	NS	NS	NS	NS	NS	NS
		12/17/2008	BRL (<0.5)					
		4/06/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
M&A-121	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/18/2006	BRL (<1.0)					
		10/18/2006	BRL (<0.5)					
		5/02/2007	BRL (<0.5)					
		10/17/2007 ⁽²⁾	NS	NS	NS	NS	NS	NS
		10/22/2008 ⁽²⁾	NS	NS	NS	NS	NS	NS
		12/17/2008	BRL (<0.5)					
		4/07/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
		4/07/2010	BRL (<0.625)					
M&A-122	Intermed	10/20/2010	BRL (<0.515)					
		5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)	BRL (<0.5)
		4/19/2006	BRL (<1.0)					
		10/18/2006	BRL (<0.5)					
		5/02/2007	BRL (<0.5)					
		10/17/2007	BRL (<0.5)					
		4/16/2008	BRL (<0.5)					
		10/22/2008	BRL (<0.5)					
		4/09/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
M&A-124	Shallow	4/12/2010	BRL (<0.625)					
		10/20/2010	BRL (<0.495)					
		5/15/2006	BRL (<0.4)					
		10/19/2006	BRL (<0.5)					
		5/01/2007	BRL (<0.5)					
		10/18/2007	BRL (<0.5)					
		4/16/2008	BRL (<0.5)					
		10/22/2008	BRL (<0.5)					
		4/07/2009	BRL (<0.5)					
		10/20/2009	BRL (<0.5)					
		4/13/2010	BRL (<0.625)					
		10/21/2010	BRL (<0.500)					

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SUMMARY OF GROUNDWATER POLYCHLORINATED BIPHENYL LABORATORY ANALYTICAL RESULTS

GW Samples			Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
IEPA TACO Tier I Standard			2.5	2.5	2.5	2.5	2.5	2.5	2.5
WELL	AQUIFER	DATE	($\mu\text{g/L}$)						
M&A-126	Intermed	5/18/2004	BRL (<0.5)	BRL (<1.0)	BRL (<0.5)				
		4/18/2006	BRL (<1.0)						
		10/18/2006	BRL (<0.5)						
		4/30/2007	BRL (<0.5)						
		10/18/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/23/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
		4/12/2010	BRL (<0.625)						
		10/21/2010	BRL (<0.505)						
M&A-127	Intermed	10/28/2008	BRL (<0.5)						
M&A-130	Shallow	4/16/2008	BRL (<0.5)						
		10/29/2008	BRL (<0.5)						
		4/09/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
M&A-131	Intermed	12/19/2006	BRL (<0.5)						
		10/29/2008	BRL (<0.5)						
		4/09/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
M&A-133	Intermed	12/19/2006	BRL (<0.5)						
		10/28/2008	BRL (<0.5)						
		4/07/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
M&A-301	Shallow	4/19/2006	BRL (<1.0)						
		10/18/2006	BRL (<0.5)						
		5/02/2007	BRL (<0.5)						
		10/17/2007	BRL (<0.5)						
		4/16/2008	BRL (<0.5)						
		10/22/2008	BRL (<0.5)						
		4/09/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						
M&A-208	Intermed	4/12/2010	1.08	BRL (<0.625)					
		10/20/2010	BRL (<0.490)						
		10/18/2006	BRL (<0.5)						
		4/30/2007 ⁽²⁾	NS						
		10/17/2007 ⁽²⁾	NS						
		10/28/2008	BRL (<0.5)						
(c) 2010, Mabbett & Associates, Inc.		4/9/2009	BRL (<0.5)						
		10/20/2009	BRL (<0.5)						

Notes: $\mu\text{g/L}$ - micrograms per liter

PCB analysis performed via EPA Method 8082

TACO - Tiered Approach toward Corrective Action

TACO Tier I Standards based on the Illinois Environmental Protection Agency Title 35, Admin Code 742.505

Tier 1 Remediation Objectives for Class II Groundwater

■ Shading indicates compound exceeds established Illinois EPA TACO Tier I standard.

BOLD values indicate compound was detected

NS - Not Sampled

(1) Not sampled, well was dry.

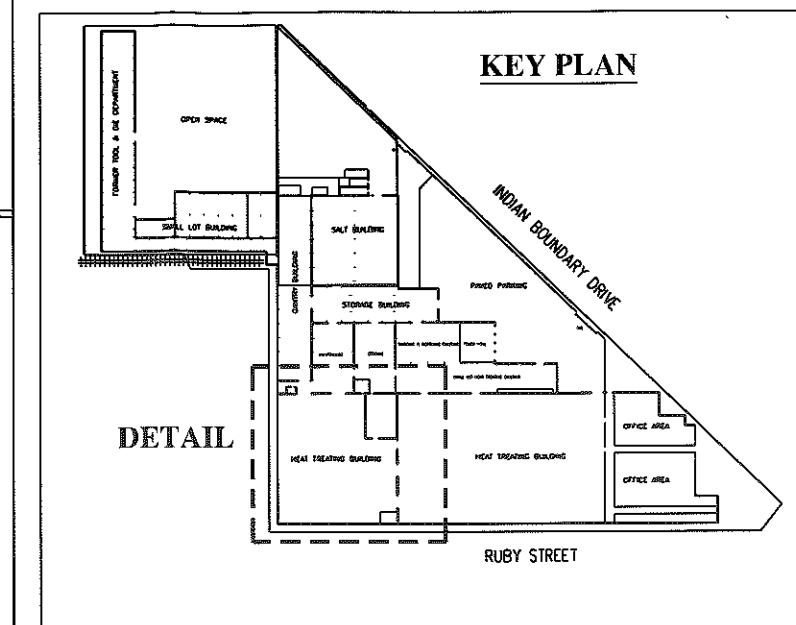
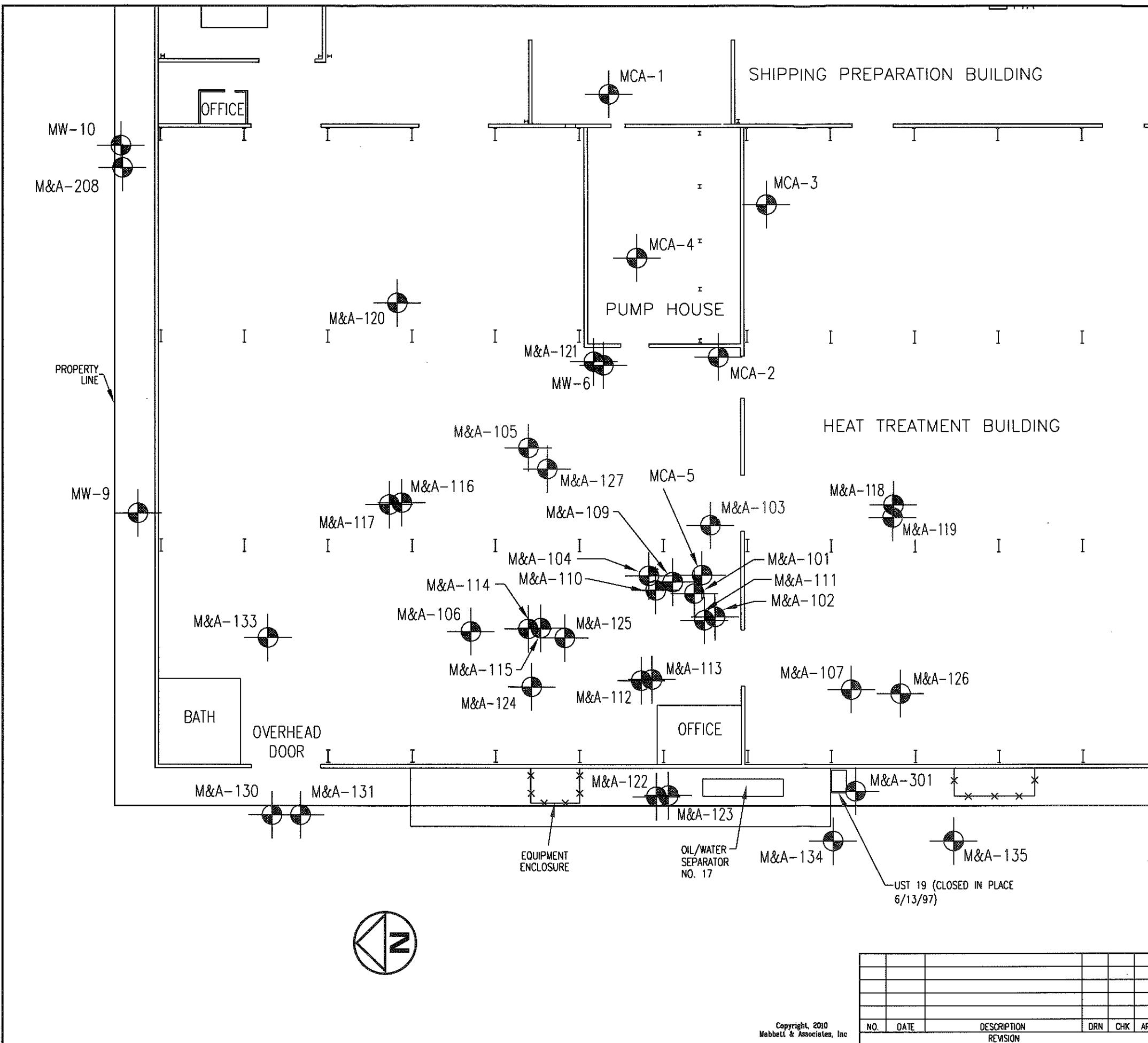
(2) Not sampled, insufficient water recharge to complete sampling.

(3) Not sampled, well contained no water, only Free Product

(4) Not sampled, obstruction in well.



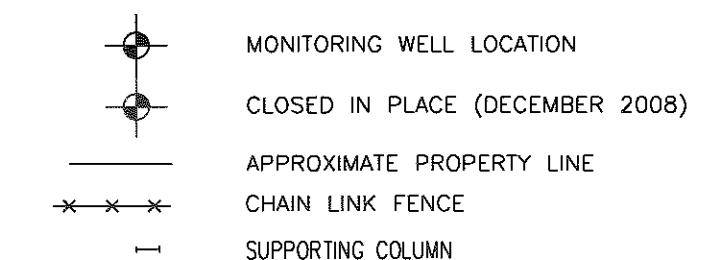
BODYCOTE THERMAL PROCESSING, INC.		
MELROSE PARK, ILLINOIS		
 Matson & Associates Architectural Engineering & Surveyors	SITE LOCUS	DRW. NO. L-1
DRAWE D.A.	APPROVED	SCALE NTS
PROJ. NO. 198802-277		



NOTES:

- MONITORING WELL AND BORING LOCATIONS INSTALLED PRIOR TO 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY M&A PERSONNEL.
- MONITORING WELL AND BORING LOCATIONS INSTALLED DURING AND AFTER 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY AN ILLINOIS REGISTERED LAND SURVEYOR.

LEGEND:

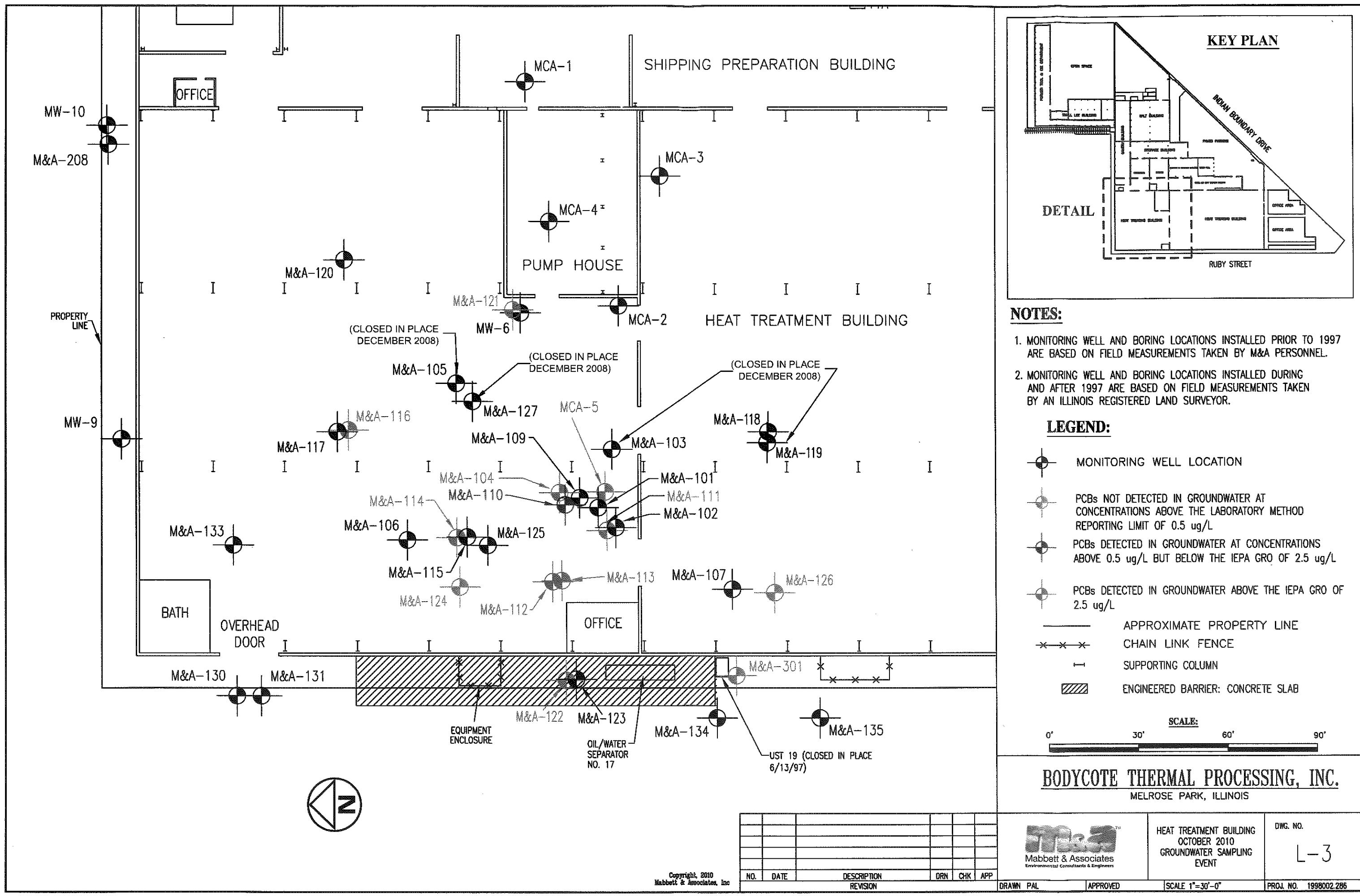


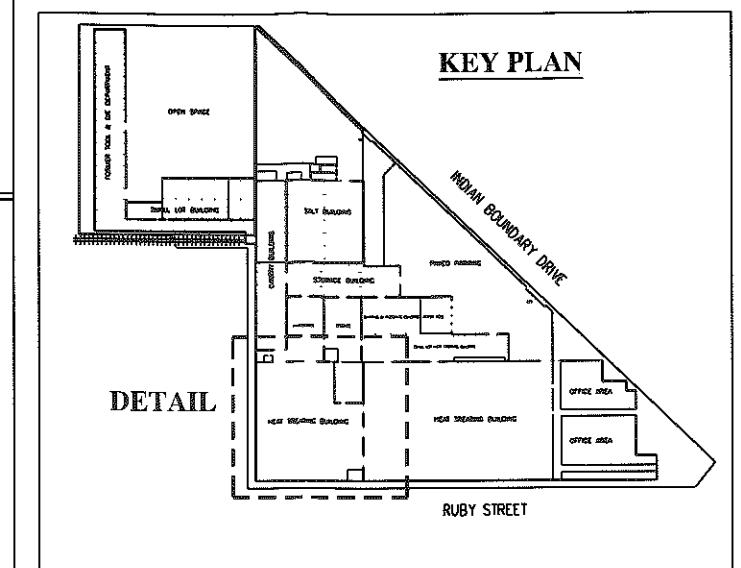
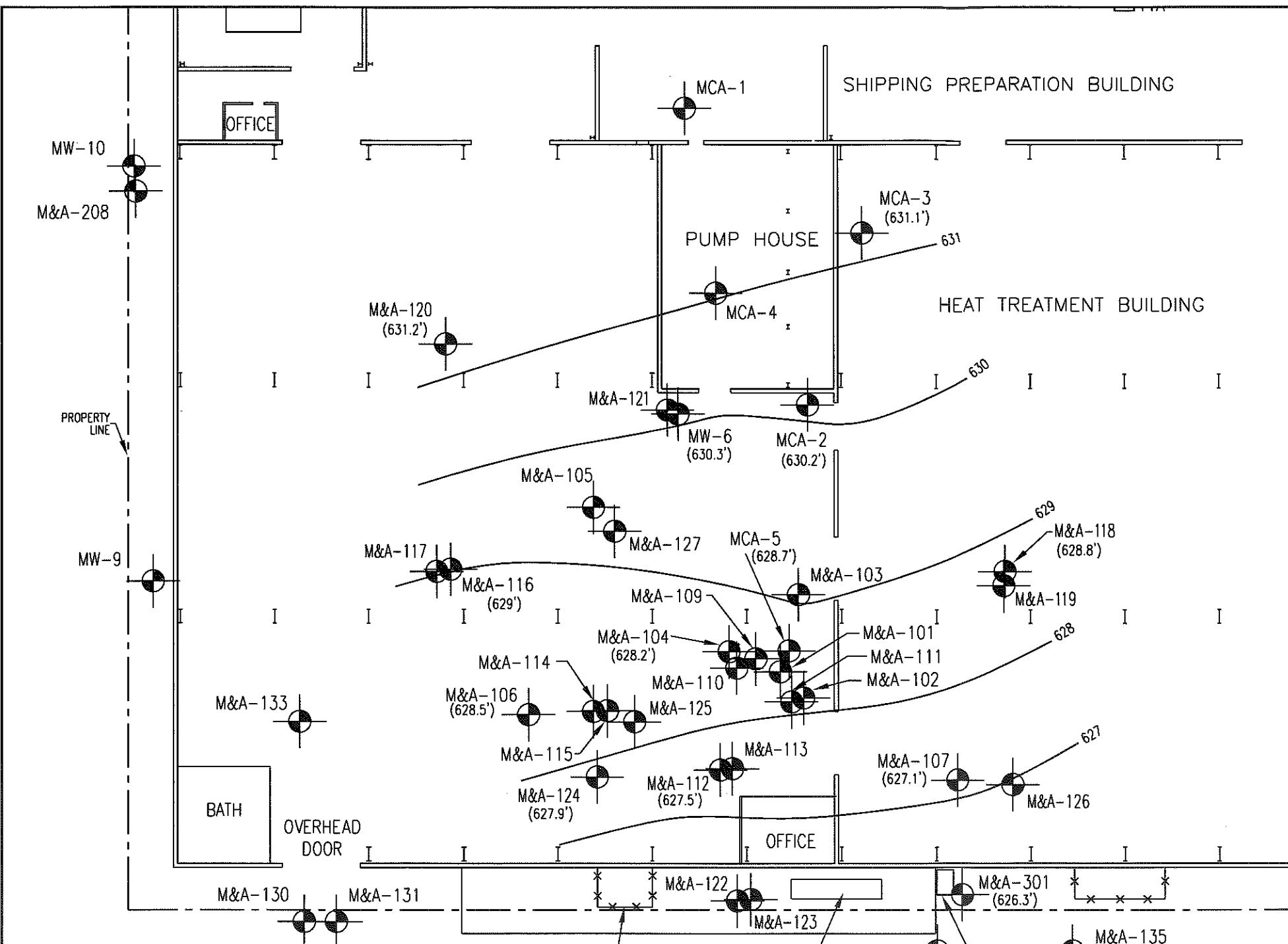
SCALE:
0' 30' 60' 90'

BODYCOTE THERMAL PROCESSING, INC.
MELROSE PARK, ILLINOIS

NO.	DATE	DESCRIPTION	DRN	CHK	APP
		REVISION			







NOTES:

- MONITORING WELL LOCATIONS INSTALLED PRIOR TO 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY M&A PERSONNEL.
- MONITORING WELL LOCATIONS INSTALLED DURING AND AFTER 1997 ARE BASED ON FIELD MEASUREMENTS TAKEN BY AN ILLINOIS REGISTERED LAND SURVEYOR.

LEGEND:

- MONITORING WELL LOCATION
- (630.5') GROUNDWATER ELEVATION, DEFINED AS NATIONAL GEODETIC VERTICAL DATUM (NGVD)
- APPROXIMATE PROPERTY LINE
- SUPPORTING COLUMN
- 1.0 FT. SHALLOW GROUNDWATER CONTOURS (OCTOBER 2010)
- CHAIN LINK FENCE
- ← GROUNDWATER FLOW DIRECTION (OCTOBER 2010)

SCALE:
0' 30' 60' 90'

BODYCOTE THERMAL PROCESSING, INC.
MELROSE PARK, ILLINOIS

Copyright, 2010
Mabbett & Associates, Inc.

NO.	DATE	DESCRIPTION	DRN	CHK	APP
		REVISION			



HEAT TREATMENT BUILDING
SHALLOW GROUNDWATER
CONTOUR PLAN
(OCTOBER 2010)

DWG. NO.
L-4

DRAWN BY APPROVED SCALE 1"=30'-0" PROJ. NO. 1998002.286

APPENDIX A
Laboratory Analytical Results
April and October 2010

May 20, 2010 9:55:52AM

Client: Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn: Christopher Mabbett

Work Order: NTD1283
Project Name: Bodycote
Project Nbr: 1998002
P/O Nbr:
Date Received: 04/14/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
MCA-5	NTD1283-01	04/12/10 10:40
M&A-104	NTD1283-02	04/12/10 09:45
M&A-110	NTD1283-03	04/12/10 09:00
M&A-111	NTD1283-04	04/12/10 11:45
M&A-112	NTD1283-05	04/13/10 13:00
M&A-113	NTD1283-06	04/13/10 10:00
M&A-114	NTD1283-07	04/07/10 13:00
M&A-116	NTD1283-08	04/07/10 11:00
M&A-121	NTD1283-09	04/07/10 11:05
M&A-122	NTD1283-10	04/12/10 12:00
M&A-124	NTD1283-11	04/13/10 00:01
M&A-126	NTD1283-12	04/12/10 15:30
M&A-301	NTD1283-13	04/12/10 14:00

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

RELEASED

9/21/20 - 2020-003646

TJW per CLM

Additional Laboratory Comments: **Revised Report 5/20/2010**

Corrected sample ID for NTD1283-01 per COC. Replaces report dated 4/23/2010 at 12:02.

Illinois Certification Number: 002179

The Chain(s) of Custody, 6 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:

Roxanne Connor

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTD1283
Project Name: Bodycote
Project Number: 1998002
Received: 04/14/10 08:00

Program Manager - Conventional Accounts

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTD1283
	5 Alfred Circle	Project Name:	Bodycote
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	04/14/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTD1283-01 (MCA-5 - Ground Water) Sampled: 04/12/10 10:40

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.694	1	04/19/10 22:44	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	88 %					04/19/10 22:44	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	67 %					04/19/10 22:44	SW846 8082	10D2552

Sample ID: NTD1283-02 (M&A-104 - Ground Water) Sampled: 04/12/10 09:45

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1242	1.66		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 19:37	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	103 %					04/20/10 19:37	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	106 %					04/20/10 19:37	SW846 8082	10D2552

Sample ID: NTD1283-03 (M&A-110 - Ground Water) Sampled: 04/12/10 09:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1248	2.31	R10	ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 19:59	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	110 %					04/20/10 19:59	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	84 %					04/20/10 19:59	SW846 8082	10D2552

Sample ID: NTD1283-04 (M&A-111 - Ground Water) Sampled: 04/12/10 11:45

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1242	1.14		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.625	1	04/20/10 20:21	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	113 %					04/20/10 20:21	SW846 8082	10D2552

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTD1283
		Project Name:	Bodycote
Attn	Christopher Mabbett	Project Number:	1998002
		Received:	04/14/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTD1283-04 (M&A-111 - Ground Water) - cont. Sampled: 04/12/10 11:45

Polychlorinated Biphenyls by EPA Method 8082 - cont.

Surr: Decachlorobiphenyl (10-149%) 110 % 04/20/10 20:21 SW846 8082 10D2552

Sample ID: NTD1283-05 (M&A-112 - Ground Water) Sampled: 04/13/10 13:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1248	8.73	R10	ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 20:43	SW846 8082	10D2552
Surr: Tetrachloro-meta-xylene (17-142%)	103 %					04/20/10 20:43	SW846 8082	10D2552
Surr: Decachlorobiphenyl (10-149%)	82 %					04/20/10 20:43	SW846 8082	10D2552

Sample ID: NTD1283-06 (M&A-113 - Ground Water) Sampled: 04/13/10 10:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1248	5.39	R10	ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 21:05	SW846 8082	10D2552
Surr: Tetrachloro-meta-xylene (17-142%)	107 %					04/20/10 21:05	SW846 8082	10D2552
Surr: Decachlorobiphenyl (10-149%)	110 %					04/20/10 21:05	SW846 8082	10D2552

Sample ID: NTD1283-07 (M&A-114 - Ground Water) Sampled: 04/07/10 13:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 00:55	SW846 8082	10D2552
Surr: Tetrachloro-meta-xylene (17-142%)	83 %					04/20/10 00:55	SW846 8082	10D2552
Surr: Decachlorobiphenyl (10-149%)	46 %					04/20/10 00:55	SW846 8082	10D2552

Sample ID: NTD1283-08 (M&A-116 - Ground Water) Sampled: 04/07/10 11:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTD1283
		Project Name:	Bodycote
Attn	Christopher Mabbett	Project Number:	1998002
		Received:	04/14/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTD1283-08 (M&A-116 - Ground Water) - cont. Sampled: 04/07/10 11:00								
Polychlorinated Biphenyls by EPA Method 8082 - cont.								
PCB-1248	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.658	1	04/20/10 01:17	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	91 %					04/20/10 01:17	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	94 %					04/20/10 01:17	SW846 8082	10D2552
Sample ID: NTD1283-09 (M&A-121 - Ground Water) Sampled: 04/07/10 11:05								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.625	1	04/20/10 01:39	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	92 %					04/20/10 01:39	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	85 %					04/20/10 01:39	SW846 8082	10D2552
Sample ID: NTD1283-10 (M&A-122 - Ground Water) Sampled: 04/12/10 12:00								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.625	1	04/20/10 02:01	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	92 %					04/20/10 02:01	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	91 %					04/20/10 02:01	SW846 8082	10D2552
Sample ID: NTD1283-11 (M&A-124 - Ground Water) Sampled: 04/13/10 00:01								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1221	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1232	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1242	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1248	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1254	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
PCB-1260	ND		ug/L	0.625	1	04/20/10 02:23	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	90 %					04/20/10 02:23	SW846 8082	10D2552
<i>Surr: Decachlorobiphenyl (10-149%)</i>	99 %					04/20/10 02:23	SW846 8082	10D2552

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTD1283
	5 Alfred Circle	Project Name:	Bodycote
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	04/14/10 08:00

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTD1283-12 (M&A-126 - Ground Water) Sampled: 04/12/10 15:30

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1221	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1232	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1242	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1248	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1254	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
PCB-1260	ND	ug/L	0.625	1	04/20/10 02:45	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	<i>91 %</i>				<i>04/20/10 02:45</i>	<i>SW846 8082</i>	<i>10D2552</i>
<i>Surr: Decachlorobiphenyl (10-149%)</i>	<i>105 %</i>				<i>04/20/10 02:45</i>	<i>SW846 8082</i>	<i>10D2552</i>

Sample ID: NTD1283-13 (M&A-301 - Ground Water) Sampled: 04/12/10 14:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	1.08	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1221	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1232	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1242	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1248	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1254	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
PCB-1260	ND	ug/L	0.625	1	04/20/10 03:07	SW846 8082	10D2552
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	<i>91 %</i>				<i>04/20/10 03:07</i>	<i>SW846 8082</i>	<i>10D2552</i>
<i>Surr: Decachlorobiphenyl (10-149%)</i>	<i>84 %</i>				<i>04/20/10 03:07</i>	<i>SW846 8082</i>	<i>10D2552</i>

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTD1283
	5 Alfred Circle	Project Name:	Bodycote
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	04/14/10 08:00

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polychlorinated Biphenyls by EPA Method 8082							
SW846 8082	10D2552	NTD1283-01	900.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-02	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-02RE1	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-03	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-03RE1	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-04	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-04RE1	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-05	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-05RE1	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-06	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-06RE1	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-07	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-08	950.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-09	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-10	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-11	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-12	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A
SW846 8082	10D2552	NTD1283-13	1000.00	5.00	04/16/10 14:25	JRT	EPA 3510C/3665A

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTD1283
Attn	Christopher Mabbett	Project Name:	Bodycote
		Project Number:	1998002
		Received:	04/14/10 08:00

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082						
10D2552-BLK1						
PCB-1016	<0.312		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1221	<0.562		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1232	<0.550		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1242	<0.412		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1248	<0.562		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1254	<0.575		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
PCB-1260	<0.275		ug/L	10D2552	10D2552-BLK1	04/19/10 22:00
Surrogate: Tetrachloro-meta-xylene	77%			10D2552	10D2552-BLK1	04/19/10 22:00
Surrogate: Decachlorobiphenyl	95%			10D2552	10D2552-BLK1	04/19/10 22:00

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTD1283
Attn	Christopher Mabbett	Project Name:	Bodycote
		Project Number:	1998002
		Received:	04/14/10 08:00

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082								
10D2552-BS1								
PCB-1016	5.00	5.18	MNR1	ug/L	104%	63 - 120	10D2552	04/19/10 22:22
PCB-1260	5.00	4.78	MNR1	ug/L	96%	36 - 138	10D2552	04/19/10 22:22
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.500	0.400			80%	17 - 142	10D2552	04/19/10 22:22
<i>Surrogate: Decachlorobiphenyl</i>	0.500	0.485			97%	10 - 149	10D2552	04/19/10 22:22

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTD1283
	5 Alfred Circle	Project Name:	Bodycote
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	04/14/10 08:00

DATA QUALIFIERS AND DEFINITIONS

- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
- R10** The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the lower value was reported due to apparent chromatographic problems.
- ND** Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEI

NTD1283

Cooler Received/Opened On 4 / 14 / 10 @ 08:15

1. Tracking # 8068 (last 4 digits, FedEx)Courier: Fed_Ex IR Gun ID 962101462. Temperature of rep. sample or temp blank when opened: 5.9 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA4. Were custody seals on outside of cooler? YES...NO...NA YESIf yes, how many and where: 15. Were the seals intact, signed, and dated correctly? YES...NO...NA YES6. Were custody papers inside cooler? YES...NO...NA NOI certify that I opened the cooler and answered questions 1-6 (initial) SJ7. Were custody seals on containers: YES NO and Intact YES...NO...NA NOWere these signed and dated correctly? YES...NO...NA NO8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES...NO...NA NO11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA NO12. Did all container labels and tags agree with custody papers? YES...NO...NA NO13a. Were VOA vials received? YES...NO...NA NOb. Was there any observable headspace present in any VOA vial? YES...NO...NA NO14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1I certify that I unloaded the cooler and answered questions 7-14 (initial) SJ15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA NOb. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA NO16. Was residual chlorine present? YES...NO...NA NOI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) SJ17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA NO18. Did you sign the custody papers in the appropriate place? YES...NO...NA NO19. Were correct containers used for the analysis requested? YES...NO...NA NO20. Was sufficient amount of sample sent in each container? YES...NO...NA NOI certify that I entered this project into LIMS and answered questions 17-20 (initial) SJI certify that I attached a label with the unique LIMS number to each container (initial) SJ21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...# NO

NTD1283

04/28/10 23:59

Page 1 of 2

Client: Mabbett & Associates, Inc. (10615)
Address: 5 Alfred Circle
City, State, Zip: Bedford MA 01730
Client Invoice Contact: Attn: Accounts Payable
Client Project Mgr: Christopher Mabbett
Client Telephone#: (781) 275-6050 Fax: (781) 275-5651
Sampler Name (Print) Christopher L Mabbett
SamplerSignature: Christopher L Mabbett

TA Account #: 1408030 PO #: 4580
Invoice to: Mabbett & Associates, Inc. (10615)
Report to: Christopher Mabbett
Project Name: Bodycote 1998002.277
Facility ID: 1998002.277
Reg District (CA):
Site Address:
City,State,Zip: Illinois
Analyze for

Sample ID	Date Sampled	Time Sampled	# Containers Shipped	Field Filtered	Composite	Grab	Preservative	(Yellow Label) Glass H ₂ SO ₄	(Red Label) HNO ₃	(Black Label) None	Wastewater	Groundwater	Drinking Water	Sludge	Soil	Matrix				RUSH/TAT (Pre Schedule)	
																8082 PCBs in Oil	8082 PCBs	(specify)	Other		
MCA-5	4/12/10	1040	2	X			N			X										NTD 1283-	01
MCA-104	4/12/10	0945	2	X			N			X											02
MCA-110	4/12/10	0900	2	X			N			X											03
MCA-111	4/12/10	1145	2	X			N			X											04
MCA-112	4/13/10	1300	2	X			N			X											05
MCA-113	4/13/10	1000	2	X			N			X											06
MCA-114	4/17/10	1300	2	X			N			X											07
MCA-116	4/17/10	1100	2	X			N			X											08
MCA-121	4/17/10	1105	2	X			N			X											09
MCA-122	4/12/10	1200	2	X			N			X											10

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.

* Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES/SPECIAL INSTRUCTIONS: BO # 18952

Temp Blank in each cooler

Relinquished by:	Date: 4/13/10	Time: 15:00	Received by:	Date:	Time:	Relinquished by:	Date:	Time:
Christopher Mabbett								
Shipped Via: FedEx			Shipped Via:			QC Deliverables (Please Circle One):		Date Due of Report:
Received for TestAmerica by: mab	Date: 4/14/10	Time: 9:10 AM	Temperature Upon Receipt:	Sample Containers Intact? Y N	VOCs Free of Headspace? Y N	Level 2 Level 3 Level 4 Site Specific (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)		

41186149 8057 | 41186149 8046 | 41186149 806f | 41186149 8024



THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
 2960 Foster Creighton Drive * Nashville TN 37204
 Phone: (800) 765-0980 / (615) 726-0177 Fax:(615) 726-3404
 , "Reg District (CA)"

Page 2 of 2

Client: Mabbett & Associates, Inc. (10615)

Address: 5 Alfred Circle

City, State, Zip: Bedford MA 01730

Client Invoice Contact: Attn: Accounts Payable

Client Project Mgr: Christopher Mabbett

Client Telephone#: (781) 275-6050

Fax: (781) 275-5651

Sampler Name (Print) Christopher L Mabbett

SamplerSignature: Christopher L Mabbett

TA Account #: 1408030 PO #: 4580

Invoice to: Mabbett & Associates, Inc. (10615)

Report to: Christopher Mabbett

Project Name: Bodycote 1998002.277

Facility ID: 1998002.277

Reg District (CA):

Site Address:

City, State, Zip: Illinois

Sample ID	Date Sampled	# Containers Shipped	Time Sampled	Preservative	Matrix	Analyze for		RUSH TAT (Pre Schedule)*
						(Specify)	Other	
MFA-124	4/13/10	2		(Yellow Label) Glass H2SO4	Groundwater	X	X	1283 11
MFA-126	4/12/10	1530	1530	(Red Label) HNO3	Drinking Water	X	X	12
MFA-301	4/12/10	1400	1400	(Black Label) Plastic H2SO4	Wastewater	X	X	13
				(Orange Label) NaOH				
				(Blue Label) HCl				
				Sodium Bisulfate				
				Methanol				
				Field Filtered				
				Composite				
				Grab				

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.

* Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

There may be a charge assessed for TestAmerica disposing of sample remainders.

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Relinquished by:	Date:	Time:
Christopher L Mabbett	4/13/10	1500						

Shipped Via:	Shipped Via:			QC Deliverables (Please Circle One):			Date Due of Report:
FedEx				Level 2 Level 3 Level 4 Site Specific (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)			

Received for TestAmerica by:	Date:	Time:	Temperature Upon Receipt:	Sample Containers Intact? Y N	VOCs Free of Headspace? Y N	
MLM	4/14/10	0835				



TESTS FOR ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 4 / 14 / 10 @ 08 : 15

1. Tracking # 8024 (last 4 digits, FedEx)Courier: Fed_Ex IR Gun ID 962101462. Temperature of rep. sample or temp blank when opened: 0 . 0 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA4. Were custody seals on outside of cooler? YES..NO..NAIf yes, how many and where: Front back5. Were the seals intact, signed, and dated correctly? YES..NO..NA6. Were custody papers inside cooler? YES..NO..NAI certify that I opened the cooler and answered questions 1-6 (initial) m7. Were custody seals on containers: YES NO and Intact YES..NO..NA

Were these signed and dated correctly? YES..NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES..NO..NA11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO..NA12. Did all container labels and tags agree with custody papers? YES..NO..NA13a. Were VOA vials received? YES..NO..NA

b. Was there any observable headspace present in any VOA vial? YES..NO..NA

14. Was there a Trip Blank in this cooler? YES..NO..NA If multiple coolers, sequence # mI certify that I unloaded the cooler and answered questions 7-14 (initial) m

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO..NA

16. Was residual chlorine present? YES..NO..NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) m17. Were custody papers properly filled out (ink, signed, etc)? YES..NO..NA18. Did you sign the custody papers in the appropriate place? YES..NO..NA19. Were correct containers used for the analysis requested? YES..NO..NA20. Was sufficient amount of sample sent in each container? YES..NO..NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) mI certify that I attached a label with the unique LIMS number to each container (initial) m21. Were there Non-Conformance issues at login? YES..NO Was a PIPE generated? YES..NO #

COOLER RECEIPT FORM

 Cooler Received/Opened On 04/14/10 @ 08:15

0

COOLER

 1. Tracking # COOLER (last 4 digits, FedEx)

 Courier: FED-EX IR Gun ID 97310166

 2. Temperature of rep. sample or temp blank when opened 22 Degrees Celsius

 3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler?

YES...NO...NA

 If yes, how many and where: 2 FLASKS

5. Were the seals intact, signed, and dated correctly?

YES...NO...NA

6. Were custody papers inside cooler?

YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial)

 7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly?

YES...NO...NA

 8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

 9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?

YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc.)?

YES...NO...NA

12. Did all container labels and tags agree with custody papers?

YES...NO...NA

13a. Were VOA vials received?

YES...NO...NA

b. Was there any observable headspace present in any VOA vial?

YES...NO...NA

 14. Was there a Trip Blank in this cooler? YES NO. NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (initial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used

YES...NO...NA

16. Was residual chlorine present?

YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial)

17. Were custody papers properly filled out (ink, signed, etc.)?

YES...NO...NA

18. Did you sign the custody papers in the appropriate place?

YES...NO...NA

19. Were correct containers used for the analysis requested?

YES...NO...NA

20. Was sufficient amount of sample sent in each container?

YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)
I certify that I attached a label with the unique LIMS number to each container (initial)

 21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO...# _____

COOLER RECEIPT FORM

Cooler Received/Opened On 4 / 14 / 10 @ 08:15

1. Tracking # 8057 (last 4 digits, FedEx)Courier: Fed_Ex IR Gun ID 962101462. Temperature of rep. sample or temp blank when opened: 41 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA4. Were custody seals on outside of cooler? YES NO NAIf yes, how many and where: 25. Were the seals intact, signed, and dated correctly? YES NO NA6. Were custody papers inside cooler? YES NO NAI certify that I opened the cooler and answered questions 1-6 (initial) R7. Were custody seals on containers: YES NO and Intact YES...NO...NAWere these signed and dated correctly? YES NO NA8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES NO NA11. Were all container labels complete (#, date, signed, pres., etc)? YES NO NA12. Did all container labels and tags agree with custody papers? YES NO NA13a. Were VOA vials received? YES NO NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES NO NA If multiple coolers, sequence # 10I certify that I unloaded the cooler and answered questions 7-14 (initial) R

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES NO NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) R17. Were custody papers properly filled out (ink, signed, etc)? YES NO NA18. Did you sign the custody papers in the appropriate place? YES NO NA19. Were correct containers used for the analysis requested? YES NO NA20. Was sufficient amount of sample sent in each container? YES NO NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) RI certify that I attached a label with the unique LIMS number to each container (initial) R21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO ..#

November 02, 2010 4:43:17PM

Client: Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn: Christopher Mabbett

Work Order: NTJ2776
Project Name: Bodycote 1998002.286
Project Nbr: 1998002
P/O Nbr: 4637
Date Received: 10/21/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
M&A-110-101910	NTJ2776-01	10/19/10 10:15
M&A-114-101910	NTJ2776-02	10/19/10 14:15
M&A-111-101910	NTJ2776-03	10/19/10 11:10
M&A-112-101910	NTJ2776-04	10/19/10 13:22
M&A-104-101910	NTJ2776-05	10/19/10 09:30
M&A-5-101910	NTJ2776-06	10/19/10 08:15
M&A-121-102010	NTJ2776-07	10/20/10 10:20
M&A-116-102010	NTJ2776-08	10/20/10 09:45
M&A-122-102010	NTJ2776-09	10/20/10 11:30

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

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Illinois Certification Number: 200010

RELEASED

9/21/20 - 2020-003646
TJW per CLM

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Ken A. Hayes

Senior Project Manager

Client Mabbett & Associates, Inc. (10615)
 5 Alfred Circle
 Bedford, MA 01730
 Attn Christopher Mabbett

Work Order: NTJ2776
 Project Name: Bodycote 1998002.286
 Project Number: 1998002
 Received: 10/21/10 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTJ2776-01 (M&A-110-101910 - Ground Water) Sampled: 10/19/10 10:15								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1248	0.842		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.495	1	10/31/10 22:54	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	87 %					10/31/10 22:54	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	70 %					10/31/10 22:54	SW846 8082	10J5130
Sample ID: NTJ2776-02 (M&A-114-101910 - Ground Water) Sampled: 10/19/10 14:15								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.495	1	10/31/10 23:15	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	78 %					10/31/10 23:15	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	40 %					10/31/10 23:15	SW846 8082	10J5130
Sample ID: NTJ2776-03 (M&A-111-101910 - Ground Water) Sampled: 10/19/10 11:10								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.490	1	10/31/10 23:37	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	87 %					10/31/10 23:37	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	74 %					10/31/10 23:37	SW846 8082	10J5130
Sample ID: NTJ2776-04 (M&A-112-101910 - Ground Water) Sampled: 10/19/10 13:22								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1248	3.12		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.490	1	10/31/10 23:58	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	82 %					10/31/10 23:58	SW846 8082	10J5130

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTJ2776
Attn	Christopher Mabbett	Project Name:	Bodycote 1998002.286
		Project Number:	1998002
		Received:	10/21/10 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTJ2776-04 (M&A-112-101910 - Ground Water) - cont. Sampled: 10/19/10 13:22

Polychlorinated Biphenyls by EPA Method 8082 - cont.

Surr: Decachlorobiphenyl (10-149%)	41 %	10/31/10 23:58	SW846 8082	10J5130
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Sample ID: NTJ2776-05 (M&A-104-101910 - Ground Water) Sampled: 10/19/10 09:30

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1221	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1232	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1242	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1248	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1254	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
PCB-1260	ND	ug/L	0.490	1	11/01/10 00:19	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	76 %				11/01/10 00:19	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	76 %				11/01/10 00:19	SW846 8082	10J5130

Sample ID: NTJ2776-06 (M&A-5-101910 - Ground Water) Sampled: 10/19/10 08:15

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1221	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1232	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1242	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1248	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1254	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
PCB-1260	ND	ug/L	0.485	1	11/01/10 00:41	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	86 %				11/01/10 00:41	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	39 %				11/01/10 00:41	SW846 8082	10J5130

Sample ID: NTJ2776-07 (M&A-121-102010 - Ground Water) Sampled: 10/20/10 10:20

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1221	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1232	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1242	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1248	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1254	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
PCB-1260	ND	ug/L	0.515	1	11/01/10 01:45	SW846 8082	10J5130
Surr: Tetrachloro-meta-xylene (17-142%)	44 %				11/01/10 01:45	SW846 8082	10J5130
Surr: Decachlorobiphenyl (10-149%)	44 %				11/01/10 01:45	SW846 8082	10J5130

Sample ID: NTJ2776-08 (M&A-116-102010 - Ground Water) Sampled: 10/20/10 09:45

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND	ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
PCB-1221	ND	ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
PCB-1232	ND	ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
PCB-1242	ND	ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130

Client Mabbett & Associates, Inc. (10615)
 5 Alfred Circle
 Bedford, MA 01730
 Attn Christopher Mabbett

Work Order: NTJ2776
 Project Name: Bodycote 1998002.286
 Project Number: 1998002
 Received: 10/21/10 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: NTJ2776-08 (M&A-116-102010 - Ground Water) - cont. Sampled: 10/20/10 09:45								
Polychlorinated Biphenyls by EPA Method 8082 - cont.								
PCB-1248	ND		ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.505	1	11/01/10 02:07	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	89 %					11/01/10 02:07	SW846 8082	10J5130
<i>Surr: Decachlorobiphenyl (10-149%)</i>	93 %					11/01/10 02:07	SW846 8082	10J5130
Sample ID: NTJ2776-09 (M&A-122-102010 - Ground Water) Sampled: 10/20/10 11:30								
Polychlorinated Biphenyls by EPA Method 8082								
PCB-1016	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.495	1	11/01/10 02:28	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	85 %					11/01/10 02:28	SW846 8082	10J5130
<i>Surr: Decachlorobiphenyl (10-149%)</i>	87 %					11/01/10 02:28	SW846 8082	10J5130

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2776
	5 Alfred Circle	Project Name:	Bodycote 1998002,286
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/21/10 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polychlorinated Biphenyls by EPA Method 8082							
SW846 8082	10J5130	NTJ2776-01	1010.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-02	1010.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-03	1020.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-04	1020.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-05	1020.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-06	1030.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-07	970.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-08	990.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2776-09	1010.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2776
	5 Alfred Circle	Project Name:	Bodycote 1998002.286
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/21/10 08:10

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082						
10J5130-BLK1						
PCB-1016	<0.132		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1221	<0.186		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1232	<0.200		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1242	<0.188		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1248	<0.141		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1254	<0.111		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1260	<0.200		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
Surrogate: Tetrachloro-meta-xylene	79%			10J5130	10J5130-BLK1	10/31/10 18:58
Surrogate: Decachlorobiphenyl	69%			10J5130	10J5130-BLK1	10/31/10 18:58

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTJ2776
Project Name: Bodycote 1998002.286
Project Number: 1998002
Received: 10/21/10 08:10

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082								
10J5130-BS1								
PCB-1016	5.00	4.18	MNR1	ug/L	84%	63 - 120	10J5130	10/31/10 19:19
PCB-1260	5.00	4.02	MNR1	ug/L	80%	36 - 138	10J5130	10/31/10 19:19
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.500	0.425			85%	17 - 142	10J5130	10/31/10 19:19
<i>Surrogate: Decachlorobiphenyl</i>	0.500	0.355			71%	10 - 149	10J5130	10/31/10 19:19

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTJ2776
Project Name: Bodcote 1998002.286
Project Number: 1998002
Received: 10/21/10 08:10

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Illinois
SW846 8082	Water	N/A	X	X

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2776
	5 Alfred Circle	Project Name:	Bodycote 1998002.286
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/21/10 08:10

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville does not hold NELAC certifications for the following analytes included in this report

<u>Method</u>	<u>Matrix</u>	<u>Analyte</u>
---------------	---------------	----------------

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTJ2776
Project Name: Bodycote 1998002.286
Project Number: 1998002
Received: 10/21/10 08:10

DATA QUALIFIERS AND DEFINITIONS

- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



COOLER RECEIPT

Cooler Received/Opened On_10/21/10@ 08:10

NTJ2776

1. Tracking # 2178 (last 4 digits, Fed)Courier: FED-EX IR Gun ID 973101662. Temperature of rep. sample or temp blank when opened 01 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA4. Were custody seals on outside of cooler? YES NO..NAIf yes, how many and where: 2-FROST5. Were the seals intact, signed, and dated correctly? YES NO..NA6. Were custody papers inside cooler? YES NO..NAI certify that I opened the cooler and answered questions 1-6 (initial) ✓7. Were custody seals on containers: YES NO and Intact YES NO..NAWere these signed and dated correctly? YES NO..NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None10. Did all containers arrive in good condition (unbroken)? YES NO..NA11. Were all container labels complete (#, date, signed, pres., etc)? YES NO..NA12. Did all container labels and tags agree with custody papers? YES NO..NA

13a. Were VOA vials received?

b. Was there any observable headspace present in any VOA vial? YES NO..NA14. Was there a Trip Blank in this cooler? YES NO..NA If multiple coolers, sequence # 112, 104,I certify that I unloaded the cooler and answered questions 7-14 (initial) ✓15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO..NAb. Did the bottle labels indicate that the correct preservatives were used YES NO..NA16. Was residual chlorine present? YES NO..NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ✓17. Were custody papers properly filled out (ink, signed, etc)? YES NO..NA18. Did you sign the custody papers in the appropriate place? YES NO..NA19. Were correct containers used for the analysis requested? YES NO..NA20. Was sufficient amount of sample sent in each container? YES NO..NAI certify that I entered this project into LIMS and answered questions 17-20 (initial) ✓I certify that I attached a label with the unique LIMS number to each container (initial) ✓21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO..# 58478

TestAmerica

TESTING
Nashville, TN

COOLER RECEIPT FORM

Cooler Received/Opened On 10/21/2010 @ 08:10

1. Tracking # 2167 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 11-6 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES...NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None 155g of water

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (initial) ✓

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) ✓

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) ✓

I certify that I attached a label with the unique LIMS number to each container (initial) ✓

21. Were there Non-Conformance issues at login? YES...NO... Was a PIPE generated? YES...NO...#

✓ 10/11/10

✓ 10/11/10



THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton Drive * Nashville TN 37204
Phone: (800) 765-0980 / (615) 726-0177 Fax:(615) 726-3404
, "Reg District (CA)"

Page 1 of 1
4637

Client: Mabbett & Associates, Inc. (10615)

Address: 5 Alfred Circle

City, State, Zip: Bedford

MA 01730

Client Invoice Contact: Attn: Accounts Payable

Client Project Mgr: Christopher Mabbett

Client Telephone#: (781) 275-6050

Fax: (781) 275-5651

Sampler Name (Print) Christopher Louis Mabbett

SamplerSignature: Christopher L. Mabbett

TA Account #: 1408030

PO #:

Invoice to: Mabbett & Associates, Inc. (10615)

Report to: Christopher Mabbett

Project Name: Bodycote 1998002 ~~248~~ 286

Facility ID: 1998002 ~~248~~

Reg District (CA):

Site Address: 1975 N Ruby St

City,State,Zip: Melrose Park Illinois 60160

Analyze for

NTJ2776

11/04/10 23:59

RUSH/TAT (Pre Schedule)*

Sample ID	Date Sampled	Time Sampled	# Containers Shipped	Time	Preservative	(specify) Other	Matrix	Analyze for																
								8082 PCBs in Oil	8082 PCBs	Soil	Studge	Drinking Water	Wastewater	Groundwater	(Black Label) None	(Red Label) HNO3	(Yellow Label) Glass H2SO4	(Yellow Label) Plastic H2SO4	(Orange Label) NaOH	(Blue Label) HCL	Sodium Bisulfate	Methanol	Field Filtered	Composite
MFA-110 - 101910	10/19/10	10:15	2	X																				
MFA-111 - 101910	10/19/10	14:15	2	X																				
MFA-111 - 101910	10/19/10	15:10	2	X																				
MFA-112 - 101910	10/19/10	13:22	2	X																				
MFA-104 - 101910	10/19/10	09:30	2	X																				
MCA-5 - 101910	10/19/10	08:15	2	X																				
MFA-121-102010	10/20/10	10:20	2	X																				
MFA-116 - 102010	10/20/10	09:45	2	X																				
MFA-122 - 102010	10/20/10	11:30	2	X																				

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.

* Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES/SPECIAL INSTRUCTIONS: BO # 21733

2 coolers FedEx Ex # 4634 40912167

Relinquished by: <i>Christopher L. Mabbett</i>	Date: 10/19/10	Time: 1500	Received by:	Date:	Time:	Relinquished by:	Date:	Time:
Shipped Via:	Shipped Via:				QC Deliverables (Please Circle One):			Date Due of Report:
Received for TestAmerica by: <i>g-lmf</i>	Date: 10/20/10	Time: 08:10	Temperature Upon Receipt: <input checked="" type="radio"/> O	Sample Containers Intact? Y N	Level 2 Level 3 Level 4 Site Specific (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)	VOCs Free of Headspace? Y N		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

November 02, 2010 4:30:38PM

Client:	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2767
	5 Alfred Circle	Project Name:	Bodycote 1998002
	Bedford, MA 01730	Project Nbr:	1998002
Attn:	Christopher Mabbett	P/O Nbr:	4637
		Date Received:	10/22/10

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
M&A-301-102010	NTJ2767-01	10/20/10 13:20
M&A-113-102110	NTJ2767-02	10/21/10 08:20
M&A-126-102110	NTJ2767-03	10/21/10 09:00
M&A-124-102110	NTJ2767-04	10/21/10 10:30

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately at 615-726-0177.

Illinois Certification Number: 200010

RELEASED

9/21/20 - 2020-003646
TJW per CLM

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

These results relate only to the items tested. This report shall not be reproduced except in full and with permission of the laboratory.

All solids results are reported in wet weight unless specifically stated.

Estimated uncertainty is available upon request.

This report has been electronically signed.

Report Approved By:



Ken A. Hayes

Senior Project Manager

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTJ2767
Attn	Christopher Mabbett	Project Name:	Bodycote 1998002
		Project Number:	1998002
		Received:	10/22/10 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTJ2767-01 (M&A-301-102010 - Ground Water) Sampled: 10/20/10 13:20

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.490	1	10/31/10 20:45	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	86 %					10/31/10 20:45	SW846 8082	10J5130
<i>Surr: Decachlorobiphenyl (10-149%)</i>	63 %					10/31/10 20:45	SW846 8082	10J5130

Sample ID: NTJ2767-02 (M&A-113-102110 - Ground Water) Sampled: 10/21/10 08:20

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1221	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1232	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1242	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1248	37.6		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1254	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
PCB-1260	ND		ug/L	2.48	5	11/02/10 05:54	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	90 %					11/02/10 05:54	SW846 8082	10J5130
<i>Surr: Decachlorobiphenyl (10-149%)</i>	80 %					11/02/10 05:54	SW846 8082	10J5130

Sample ID: NTJ2767-03 (M&A-126-102110 - Ground Water) Sampled: 10/21/10 09:00

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.505	1	10/31/10 21:28	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	87 %					10/31/10 21:28	SW846 8082	10J5130
<i>Surr: Decachlorobiphenyl (10-149%)</i>	87 %					10/31/10 21:28	SW846 8082	10J5130

Sample ID: NTJ2767-04 (M&A-124-102110 - Ground Water) Sampled: 10/21/10 10:30

Polychlorinated Biphenyls by EPA Method 8082

PCB-1016	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1221	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1232	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1242	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1248	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1254	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
PCB-1260	ND		ug/L	0.500	1	10/31/10 22:32	SW846 8082	10J5130
<i>Surr: Tetrachloro-meta-xylene (17-142%)</i>	89 %					10/31/10 22:32	SW846 8082	10J5130

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2767
	5 Alfred Circle	Project Name:	Bodycote 1998002
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/22/10 08:10

ANALYTICAL REPORT

Analyte	Result	Flag	Units	MRL	Dilution Factor	Analysis Date/Time	Method	Batch
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Sample ID: NTJ2767-04 (M&A-124-102110 - Ground Water) - cont. Sampled: 10/21/10 10:30

Polychlorinated Biphenyls by EPA Method 8082 - cont.

Surr: Decachlorobiphenyl (10-149%) 86 % 10/31/10 22:32 SW846 8082 10J5130

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTJ2767
Project Name: Bodcote 1998002
Project Number: 1998002
Received: 10/22/10 08:10

SAMPLE EXTRACTION DATA

Parameter	Batch	Lab Number	Wt/Vol Extracted	Extracted Vol	Date	Analyst	Extraction Method
Polychlorinated Biphenyls by EPA Method 8082							
SW846 8082	10J5130	NTJ2767-01	1020.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2767-02	1010.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2767-02RE1	1010.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2767-03	990.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A
SW846 8082	10J5130	NTJ2767-04	1000.00	5.00	10/30/10 09:20	BJM	EPA 3510C/3665A

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTJ2767
Attn	Christopher Mabbett	Project Name:	Bodycote 1998002
		Project Number:	1998002
		Received:	10/22/10 08:10

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082						
10J5130-BLK1						
PCB-1016	<0.132		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1221	<0.186		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1232	<0.200		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1242	<0.188		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1248	<0.141		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1254	<0.111		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
PCB-1260	<0.200		ug/L	10J5130	10J5130-BLK1	10/31/10 18:58
<i>Surrogate: Tetrachloro-meta-xylene</i>	79%			10J5130	10J5130-BLK1	10/31/10 18:58
<i>Surrogate: Decachlorobiphenyl</i>	69%			10J5130	10J5130-BLK1	10/31/10 18:58

Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2767
	5 Alfred Circle	Project Name:	Bodycote 1998002
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/22/10 08:10

PROJECT QUALITY CONTROL DATA
LCS

Analyte	Known Val.	Analyzed Val	Q	Units	% Rec.	Target Range	Batch	Analyzed Date/Time
Polychlorinated Biphenyls by EPA Method 8082								
10J5130-BS1								
PCB-1016	5.00	4.18	MNR1	ug/L	84%	63 - 120	10J5130	10/31/10 19:19
PCB-1260	5.00	4.02	MNR1	ug/L	80%	36 - 138	10J5130	10/31/10 19:19
<i>Surrogate: Tetrachloro-meta-xylene</i>	0.500	0.425			85%	17 - 142	10J5130	10/31/10 19:19
<i>Surrogate: Decachlorobiphenyl</i>	0.500	0.355			71%	10 - 149	10J5130	10/31/10 19:19

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2960 Foster Creighton Road Nashville, TN 37204 * 800-765-0980 * Fax 615-726-3404

Client	Mabbett & Associates, Inc. (10615) 5 Alfred Circle Bedford, MA 01730	Work Order:	NTJ2767
Attn	Christopher Mabbett	Project Name:	Bodycote 1998002
		Project Number:	1998002
		Received:	10/22/10 08:10

CERTIFICATION SUMMARY

TestAmerica Nashville

Method	Matrix	AIHA	Nelac	Illinois
SW846 8082	Water	N/A	X	X

Client Mabbett & Associates, Inc. (10615)
5 Alfred Circle
Bedford, MA 01730
Attn Christopher Mabbett

Work Order: NTJ2767
Project Name: Bodcote 1998002
Project Number: 1998002
Received: 10/22/10 08:10

NELAC CERTIFICATION SUMMARY

TestAmerica Analytical - Nashville does not hold NELAC certifications for the following analytes included in this report

<u>Method</u>	<u>Matrix</u>	<u>Analyte</u>
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Client	Mabbett & Associates, Inc. (10615)	Work Order:	NTJ2767
	5 Alfred Circle	Project Name:	Bodycote 1998002
	Bedford, MA 01730	Project Number:	1998002
Attn	Christopher Mabbett	Received:	10/22/10 08:10

DATA QUALIFIERS AND DEFINITIONS

- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike.
ND Not detected at the reporting limit (or method detection limit if shown)

METHOD MODIFICATION NOTES



Cooler Received/Opened On 10/22/2010 @ 0810 NTJ2767

1. Tracking # 2189 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 8 - 3 Degrees Celsius

3. If item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

If yes, how many and where: 2 front YES...NO...NA

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) b

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) b

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO.NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) b

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) b

I certify that I attached a label with the unique LIMS number to each container (initial) b

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...# 58476



THE LEADER IN ENVIRONMENTAL TESTING

Nashville Division
2960 Foster Creighton Drive * Nashville TN 37204
Phone: (800) 765-0980 / (615) 726-0177 Fax: (615) 726-3404
,"Reg District (CA)"

Page 1 of 1

Client: Mabbett & Associates, Inc. (10615)

Address: 5 Alfred Circle

City, State, Zip: Bedford

MA 01730

Client Invoice Contact: Attn: Accounts Payable

Client Project Mgr: Christopher Mabbett

Client Telephone#: (781) 275-6050

Fax: (781) 275-5651

Sampler Name (Print)

Christopher Mabbett

Sampler Signature:

Christopher Mabbett

TA Account #: 1408030

PO #:

4637

Invoice to: Mabbett & Associates, Inc. (10615)

Report to: Christopher Mabbett

Project Name: Bodycote 1998002

Facility ID: 1998002

Reg District (CA):

Site Address:

1975 N RUBY ST

MELROSE PARK

Illinois 60160

City, State, Zip:

Analyze for

Sample ID	Date Sampled	Time Sampled	# Containers Shipped	Composite	Grab	Field Filtered	Sodium Bisulfate	Methanol	Preservative	Matrix	Analyze for							RUSH TAT (Pre Schedule)?		
									(Yellow Label) HNO3 (Red Label) HNO3	(Black Label) None	Drinking Water	Groundwater	Wastewater	Soil	Sludge	8082 PCBs in Oil	8082 PCBs	8082 PCBs	8082 PCBs	8082 PCBs
1 MFA-3C1-102110	10/20/10	1320	2	X	X	X			X	X	X	X								
2 MFA-113-102110	10/21/10	0820	2	X	X	X			X	X	X	X								
3 MFA-126-102110	10/21/10	0900	2	X	X	X														
4 MFA-124-102110	10/21/10	1030	2	X	X	X														

COMMENTS: All turn around times are calculated from the time of receipt at TestAmerica.

* Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with RUSH turn around time commitments; additional charges may be assessed.

There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES/SPECIAL INSTRUCTIONS: BO # 21733

Fed Ex # 463440912185

Relinquished by: <u>Christopher Mabbett</u>	Date: 10/21/10	Time: 1500	Received by:	Date:	Time:	Relinquished by:	Date:	Time:
Shipped Via:	Shipped Via:				QC Deliverables (Please Circle One):			Date Due of Report:
Received for TestAmerica by: <u>u</u>	Date: 10/21/10	Time: 0810	Temperature Upon Receipt:	Sample Containers Intact? Y N	VOCs Free of Headspace? Y N	Level 2 Level 3 Level 4 Site Specific (If site specific, please pre-schedule w/ TestAmerica Project Manager or attach specific instructions)		